

DRAFT

WEST ANNAPOLIS PARKING STUDY

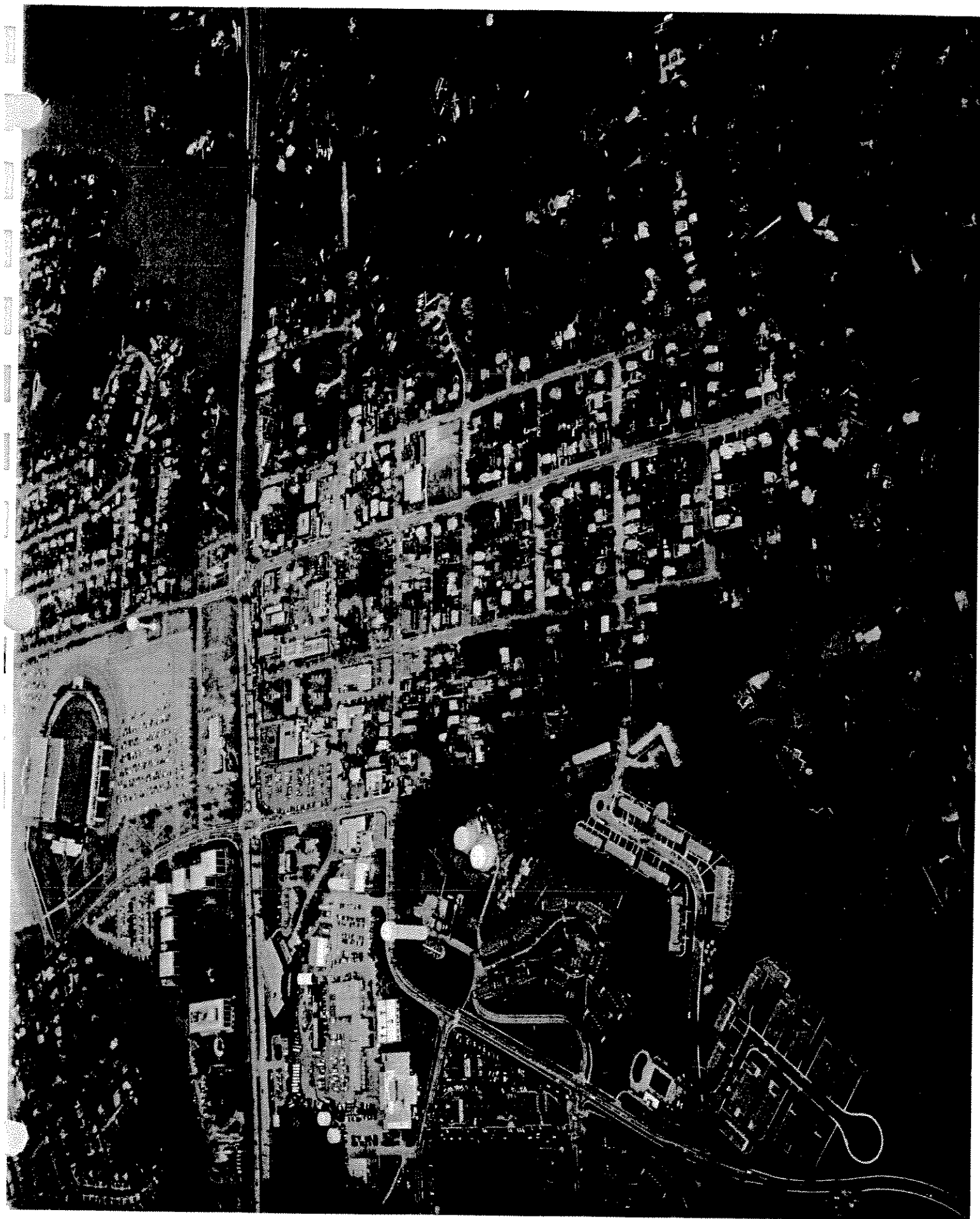
Prepared for:

**City of Annapolis, Department
of Planning and Zoning**

Prepared by:

DESMAN Associates

August, 1993



WEST ANNAPOLIS PARKING STUDY

INTRODUCTION

West Annapolis is an area bounded by Weems Creek to the north, the Severn River to the east, the United States Naval Academy to the south, and Rowe Boulevard to the west (Exhibit 1 illustrates the study area). This area represents one of the four gateway points into the historic downtown section of the City of Annapolis. As such, commercial uses have developed parallel to Rowe Blvd., along Forbes St., Giddings Ave., Ridgely Ave. and Annapolis St. The most dominant aspects of this area are the numerous medical and general office buildings centered along Melvin Ave. Additionally, neighborhood retail and some tourist oriented shops are located along Taylor Ave. and Annapolis St., serving the adjacent residential area and the nearby Naval Academy barracks. The remainder of the area is generally devoted to the quaint single family homes that originally established this area of Annapolis.

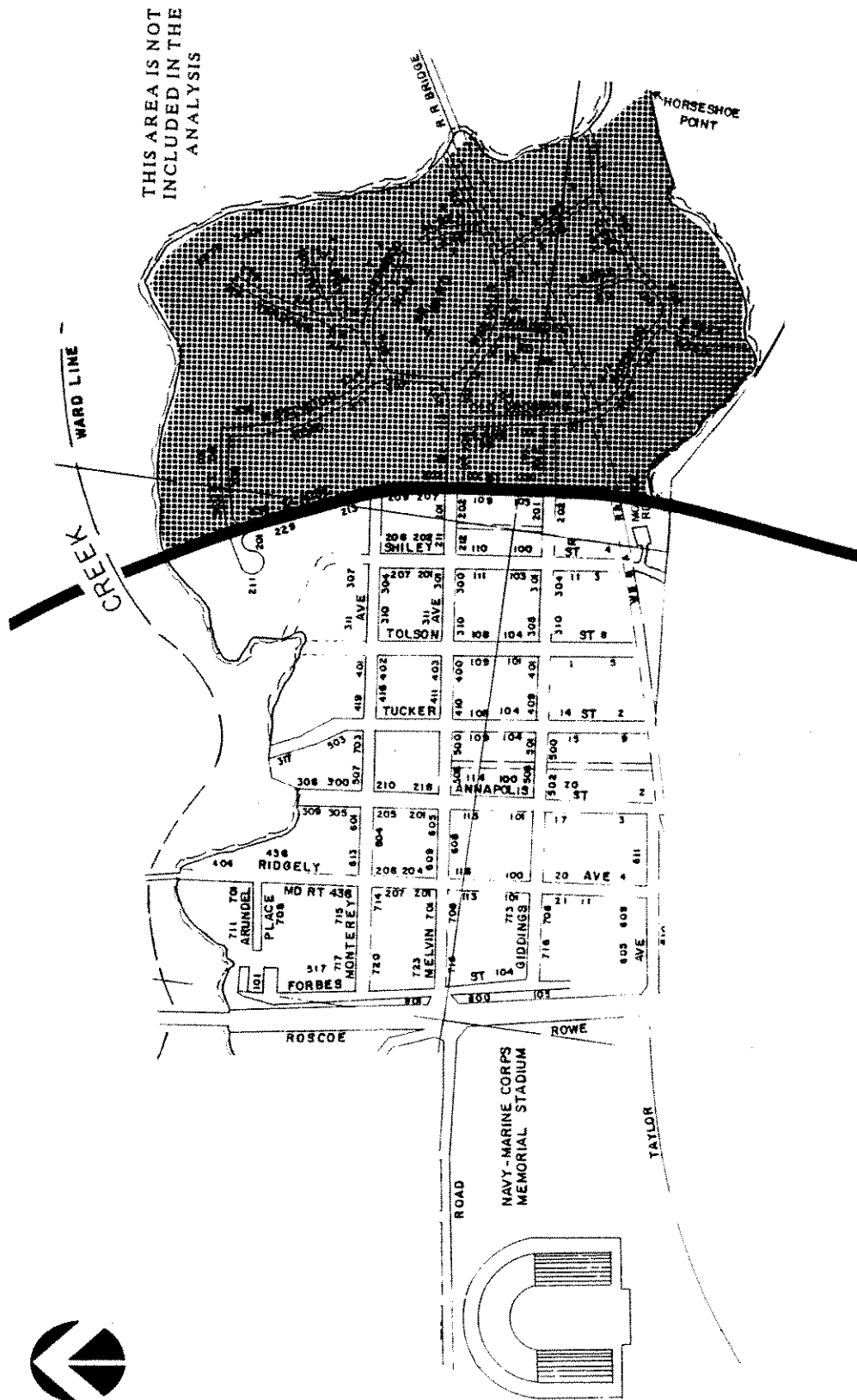
From a parking standpoint, West Annapolis represents the urban problems which occur as an older residential neighborhood faces the changes caused by economic prosperity, growth, and commercial activity. This analysis will: 1) examine the current parking related aspects of the area, including neighborhood characteristics and land use activity, 2) identify the current parking space inventory and demand levels for both a typical weekday and a Saturday, and 3) describe critical parking related issues. Once these issues are identified, parking management strategies will be proposed, highlighting goals and potential solutions which support the balance and harmony necessary to this area.

EXISTING CONDITIONS

A description of West Annapolis is presented as a part of this report so that the unique character and parking problems of the area may be more clearly identified. The following section will examine neighborhood conditions, land use character, parking supply, and parking demand for a typical weekday and a Saturday.

Neighborhood Characteristics

A walking tour of the West Annapolis study area was conducted, using the four main east/west arteries which subdivide the area; Taylor Avenue, Giddings Avenue, Melvin Avenue, and Monterey Avenue. These streets (particularly in an west to east direction) best illustrate the



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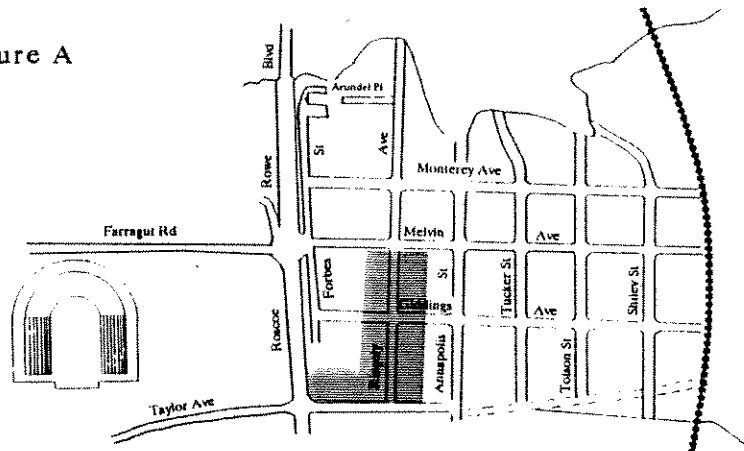
WEST ANNAPOLIS PARKING STUDY
STUDY AREA

Exhibit
1

changing character of the area as one moves through this neighborhood. In addition, the unique parking situation along Forbes St., given its location along Rowe Blvd., will also be examined. Key landmarks will be noted to help identify location and direction.

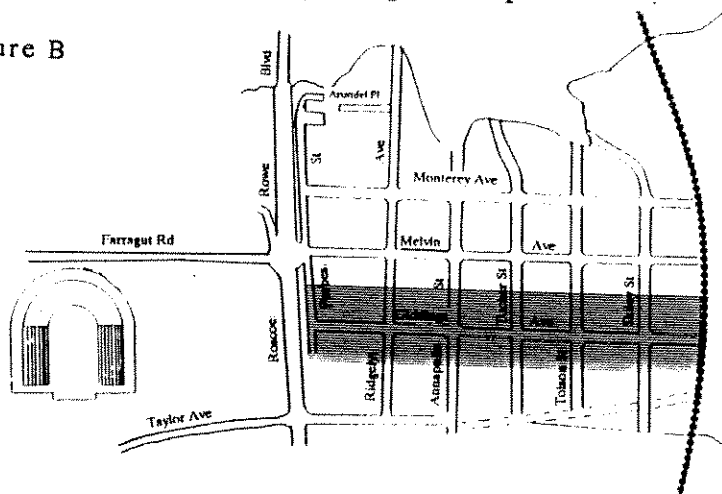
Moving east from Rowe Blvd. on Taylor Ave. (see Figure A) one first encounters Grauls Shopping Center, the source of the largest concentration of parking in the study area. This center is typical of most shopping centers with a mix of small retail/service shops and restaurants. A 7-11 convenience store and a newly completed retail/office building are situated near the corner of Annapolis St. Just around the corner along Annapolis Street to Melvin Ave. are a number of older single family homes converted to retail and customer service establishments. These colorful structures help provide a buffer between the purely commercial uses closer to Rowe Blvd. and the residential neighborhood to the east.

Figure A



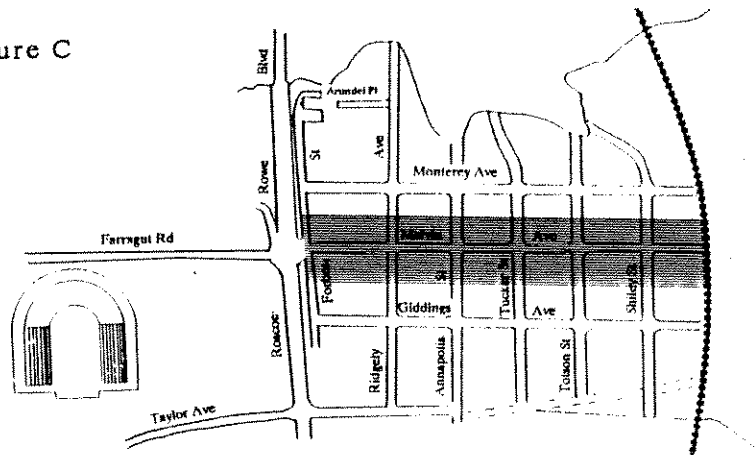
Travelling along Giddings Ave. from Forbes St. (see Figure B) the first of many medical office buildings, including the Sports Rehabilitation Center and the West Annapolis Professional Center can be found. While some on-site parking is provided for these 3 to 5 story structures, on-street parking appears to be at a premium. Upon crossing Annapolis St., the character and land use type and density quickly begins to change from converted retail shops to quiet residential neighborhoods. Older homes situated on small mature lots typify the remaining length of Giddings, as one continues past Tucker, Tolson, and Shiley Street. Though the width of these residential streets becomes more narrow, parking is still permitted on both sides of the street.

Figure B



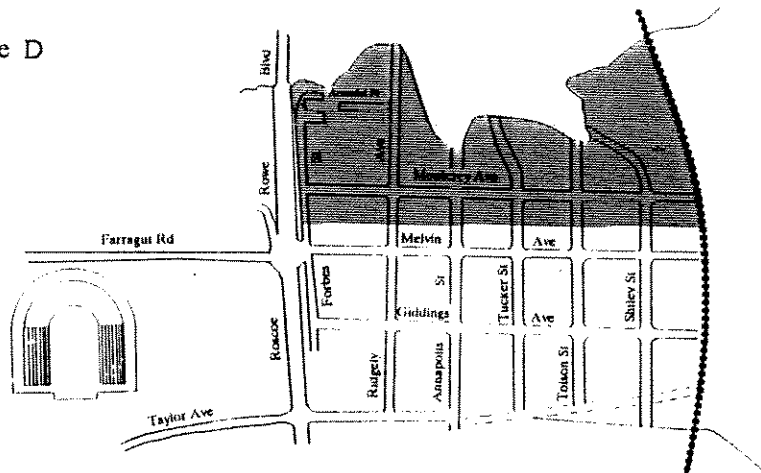
Following Melvin Ave. from Rowe Blvd. (see Figure C) reveals a similar mix of office uses (both medical and general) as was found along Giddings. As Melvin Ave. intersects with Rowe Blvd. the travel lane width becomes wider than other West Annapolis roadways to accommodate the additional traffic volumes associated with Rowe. Parking is allowed on both sides of the street to service employees and customers of the various medical and general office buildings. At the corner of Melvin and Annapolis St., an auto body shop is in operation, one of the few light industrial uses in the area. Once again a mix of converted houses (retail and office) gives way to a quiet residential neighborhood to the east. In addition, the West Annapolis Elementary School is located on the block bounded by Melvin, Annapolis, Tucker, and Monterey Avenue.

Figure C



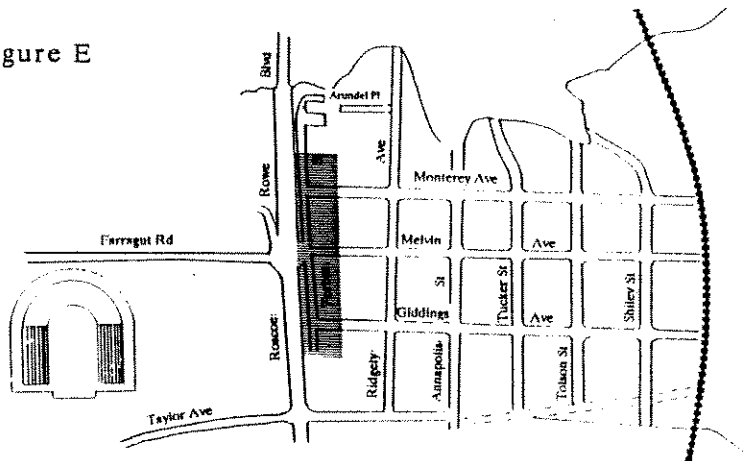
The Monterey Ave. corridor (see Figure D) represents the most dramatically mixed section within West Annapolis. Nearest to Rowe Blvd. is a large residential apartment complex and a large 4 story medical office building with underground parking. Upon passing the Citgo gas station on Ridgely Ave. and the north side of the Elementary School, the neighborhood changes to single family homes. Some of the homes, especially along Weems Creek, are newer homes. Monterey Ave. is much narrower than Melvin, yet parking is also permitted on both sides of the street. Unlike Giddings Ave., the large residential lots allow a greater number of vehicles to park on driveways and, in some cases, private garages.

Figure D



Forbes St., which runs parallel to Rowe Blvd. (see Figure E), is a narrow service road and serves the high density medical office buildings to the east and two real estate offices to the west of this. Prior to the service road extension into Grauls Shopping Center, 33 on-street parking spaces are available. Of those spaces 22 are dedicated for maximum parking of 2 hours and represent the only on-street time limits in West Annapolis. As Forbes terminates into the Grauls service road, parallel parking gives way to perpendicular parking stalls. These spaces were observed to be nearly 100% occupied throughout the weekday survey period.

Figure E



In order to illustrate overall neighborhood conditions through a description of land use characteristics, Exhibit 2 was created. It is interesting to show how the mix of small retail and service oriented uses along Annapolis St., converted from older single family homes, creates a buffer between the residential areas to the east and the high density medical/general office buildings near Rowe Blvd. Furthermore, this exhibit illustrates that the high density medical and general office uses are primarily consolidated within two blocks centered around Melvin Ave. and its intersection with Rowe Blvd. Apparently, the proximity to high volume travel corridors made these sites attractive to high density development.

Parking Characteristics

The examination of parking characteristics is separated into two categories; current parking supply and current parking demand. Parking supply refers to both public and private parking spaces located in either on-street or off-street facilities. Public spaces are those spaces available to the general public regardless of trip purpose or ultimate destination. Private parking spaces are those spaces reserved for specific user groups for a specific purpose. An example would include parking reserved for the Sports Rehabilitation Center's patients only.

Exhibit 3a illustrates the supply of parking within the West Annapolis area, including the commuter spaces available within the Navy-Marine Corps Memorial Stadium surface lot. Note that of the total 1,880 spaces within this area, over 1,000 are in private off-street locations. These spaces are typically available to serve the numerous large medical office buildings and the large residential apartment complex located near Weems Creek. They also include an assessment of the number of parking spaces within residential driveways and garages. Another

THIS AREA IS NOT
INCLUDED IN THIS
ANALYSIS

Exhibit
2

TYPE		SUPPLY
ON - STREET		
Metered		0
Restricted		0
Unrestricted		447
ON - STREET TOTAL:		447
OFF - STREET		
Garage		0
Municipal Lots		0
Private Lots		1033
OFF - STREET TOTAL:		1033
WEST ANNAPOLIS TOTAL:		1480
NAVY STADIUM COMMUTER LOT:		400
TOTAL STUDY AREA:		1880

400 off-street spaces are available to commuters within the Stadium commuter lot at a cost of \$3.00 per day. The remaining supply of about 400 spaces exist on-street in both the commercially oriented areas near Rowe Blvd. and the residential streets farther to the east.

Exhibit 3b illustrates the location of all significant off-street parking facilities within the West Annapolis study area, including the Stadium commuter lot. This Exhibit highlights the fact that nearly all of these surface lots are located west of Annapolis St., within the western commercial sector of West Annapolis.

Parking demand was examined through occupancy surveys conducted in late January, 1993 for an average weekday (Thursday) and a Saturday. In an effort to differentiate between the commercial and residential areas, Annapolis St. was used as a functional demarcation line within West Annapolis. The Stadium parking occupancy is also separately examined. Exhibit 4a and 4b illustrate these subareas and the parking occupancy between 9 AM and 5 PM for a weekday and a Saturday respectively.

Before examining the results of the occupancy surveys, a critical planning principle with regard to acceptable levels of occupancy must first be discussed. Good planning practice dictates that, in order for a parking system to function efficiently, parking supply should exceed the demand for spaces by a factor of 10 - 15%. This reservoir or "buffer" constitutes the Practical Capacity of parking supply whereby parkers can locate an available space and that sufficient spaces are available to meet high peak demands.

For the entire study area, overall parking supply reaches only 63% occupancy level for an average weekday and 52% on a Saturday. And, while the Saturday data indicates that ample on-street spaces are available, the weekday data for on-street spaces west of Annapolis St. exhibit levels of occupancy near 100% in the early afternoon. Given a more intense examination, it would appear that off-street parking facilities, including the Stadium lot, reach maximum occupancy of between 73% and 75%, while on-street parking occupancy within this more commercially oriented subarea reaches 98%. Therefore, it can be seen that off-street spaces are slightly under utilized even when considering Practical Capacity, while on-street parking is extremely close to capacity.

With regard to the residential areas (east of Annapolis St.), it appears that the commercial demand for parking to the west does not encroach into the residential neighborhood on a weekday or Saturday.

To examine the parking problems which appear unique to the area of West Annapolis west of Annapolis St., the parking activities, uses, and user groups within this commercially dominant area will be more closely assessed.

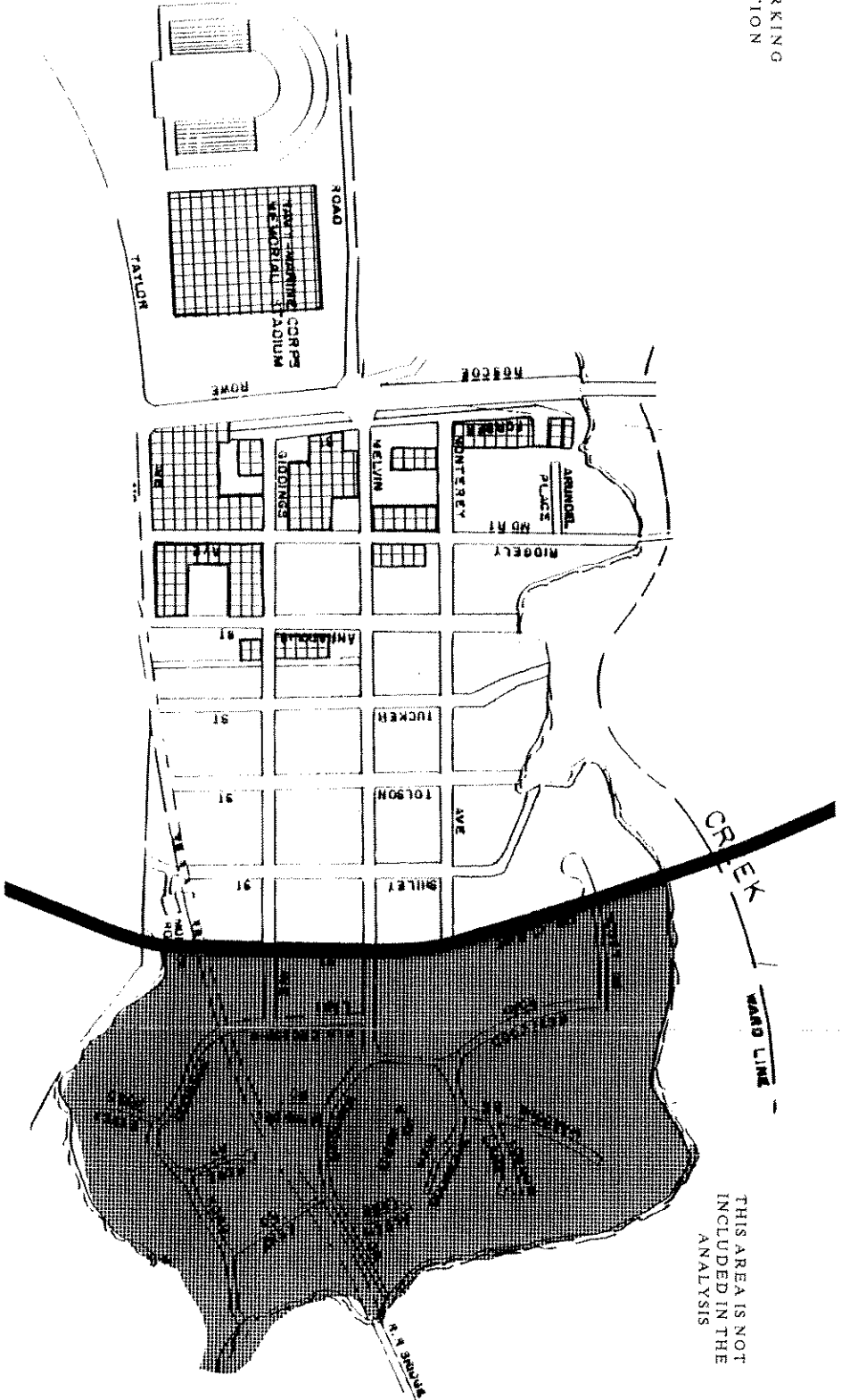
The majority of off-street parking spaces within the western portion of West Annapolis are reserved for employees, patients, and visitors of the numerous medical office buildings. Of the 927 off-street spaces west of Annapolis St., 609 are reserved for medical center uses. These off-street spaces are clearly marked for the specific employees, visitors, and patients who frequent each of the office buildings. In addition, the name and telephone numbers of towing



SURFACE PARKING
LOCATION



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WEST ANNAPOLIS PARKING STUDY
LOCATION OF OFF-STREET PARKING FACILITIES
(SURFACE LOTS)

Exhibit
3b

Street
WEST OF ANNAPOLIS ROAD (Predominantly Commercial)

	CAPACITY	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM
ON-STREET	151	103 68%	122 81%	141 94%	135 89%	(148) 98%	(148) 98%	127 84%	112 74%	93 62%
OFF-STREET	927	544 59%	620 67%	654 71%	659 71%	674 73%	666 72%	686 74%	674 73%	(694) 75%
SUBTOTAL	1078	647 60%	742 69%	796 74%	794 74%	(822) 76%	814 76%	813 75%	786 73%	787 73%

Street
EAST OF ANNAPOLIS ROAD (Predominantly Residential)

	CAPACITY	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM
ON-STREET	296	112 38%	95 32%	71 24%	66 22%	53 18%	63 21%	91 31%	107 36%	(131) 44%
OFF-STREET	106	40 38%	36 34%	37 35%	33 31%	44 42%	(52) 49%	39 37%	50 47%	51 48%
SUBTOTAL	402	152 38%	131 33%	108 27%	99 25%	97 24%	115 29%	130 32%	157 39%	(182) 45%

TOTAL WEST ANNAPOLIS STUDY AREA

	CAPACITY	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM
ON-STREET	447	215 48%	217 49%	212 48%	201 45%	201 45%	211 47%	218 49%	219 49%	(224) 50%
OFF-STREET	1033	584 57%	656 63%	691 67%	692 67%	718 70%	718 70%	725 70%	724 70%	(745) 72%
TOTAL	1480	799 54%	873 59%	904 61%	893 60%	919 62%	929 63%	943 64%	943 64%	(969) 65%

NAVY STADIUM COMMUTER LOT

	CAPACITY	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM
SURFACE LOT	400	254 64%	269 67%	289 72%	291 73%	(292) 73%	279 70%	271 68%	259 65%	185 46%

○ = Peak Period Occupancy

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WEST ANNAPOLIS PARKING STUDY
WEEKDAY PARKING OCCUPANCY

Exhibit
4a

Street
WEST OF ANNAPOLIS ROAD (Predominantly Commercial)

	CAPACITY	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM
ON-STREET	151	48 32%	77 51%	98 65%	109 72%	(118) 78%	106 70%	100 66%	75 50%	68 45%
OFF-STREET	927	324 35%	482 52%	519 56%	(528) 57%	514 55%	517 56%	556 60%	509 55%	491 53%
SUBTOTAL	1078	372 35%	559 52%	617 57%	(637) 59%	632 59%	623 58%	656 61%	584 54%	559 52%

Street
EAST OF ANNAPOLIS ROAD (Predominantly Residential)

	CAPACITY	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM
ON-STREET	296	(135) 46%	121 41%	119 40%	115 39%	101 34%	103 35%	107 36%	120 41%	124 42%
OFF-STREET	106	35 33%	32 30%	33 31%	35 33%	39 37%	(48) 45%	36 34%	46 43%	47 44%
SUBTOTAL	402	170 42%	153 38%	152 38%	150 37%	140 35%	151 38%	143 36%	166 41%	(171) 43%

TOTAL WEST ANNAPOLIS STUDY AREA

	CAPACITY	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM
ON-STREET	447	165 37%	169 38%	180 40%	(183) 41%	174 39%	169 38%	169 38%	167 37%	166 37%
OFF-STREET	1033	251 24%	349 34%	375 36%	385 37%	381 37%	393 38%	(404) 39%	380 37%	371 36%
TOTAL	1480	416 28%	518 35%	555 38%	568 38%	555 38%	562 38%	(573) 39%	547 37%	537 36%

NAVY STADIUM COMMUTER LOT

	CAPACITY	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM
SURFACE LOT	400	98 25%	110 28%	112 28%	112 28%	112 28%	114 29%	(118) 30%	109 27%	105 26%

○ = Peak Period Occupancy?

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WEST ANNAPOLIS PARKING STUDY
SATURDAY PARKING OCCUPANCY

Exhibit
4b

operators (i.e. Lowry's Towing Service) are well marked at many off-street facilities. The remaining 318 spaces provide parking for Grauls Shopping Center, real estate, financial and law offices, and a dry cleaner.

While it appears that the number of spaces satisfy parking demand associated with those uses, peak off-street occupancy reached only 75% during the weekday. Additionally, the West Annapolis Professional Center and the Orthopedic and Sports Medical Center have obtained adjacent/off-site parking locations to ensure a surplus of spaces to satisfy their specific parking needs. In summary, it appears that off-street parking supplies are sufficient to satisfy patient, visitor and employee demands. However, many of these parkers still chose to park on-street.

Occupancy surveys indicated that the 151 on-street spaces within the commercial sector of West Annapolis were fully utilized throughout the weekday survey period (98% peak occupancy). This is in contrast to the parking occupancy data obtained for off-street parking facilities which indicated relative under utilization (75% peak occupancy). Given the commercial character of this area, the provision of visible and accessible off-street parking, and the clear notation of appropriate parking use (off-street restrictions), it should be assumed that off-street parking represents the primary destination for area employees, patients, and visitors, with on-street parking available to handle the excess or overflow of parking from these commercial uses. However, based on the occupancy surveys and conditions just describe, it could be concluded that a number of vehicles parking on-street may represent parking activity not associated with medical and general office uses, and therefore prohibited from using off-street facilities. These vehicles may reflect long-term demand associated with commuters to downtown Annapolis using the shuttle system, or with the nearby courts and/or State Police operations.

Additional, it may include long-term parking associated with employees and physicians of the various offices who prefer to park on-street, or are unable to park in off-street facilities. These parking groups must be relocated to more appropriate locations to improve the utilization of on-street spaces for short-term parking. Unfortunately, of the 151 on-street spaces located west of Annapolis Rd., only 22 spaces were marked for 2-hour maximum parking (on Forbes St. between Melvin and Giddings).

PARKING ISSUES

Several parking related issues have been identified in West Annapolis, generally in the commercial sector. Within this evaluation, each issue will be identified and, given an understanding of the problem, potential solutions will be developed. The overriding problem illustrated by the examination of off-street and on-street parking characteristics indicates a need to improve the management of the existing supply of spaces. Specifically, by relocating unwarranted parking activities (long-term parking) from on-street spaces, improving the utilization of on-street spaces for short-term parkers, and minimizing the potential encroachment of commercial parking activities into residential areas, the existing supply of spaces should sufficiently serve this area's parking requirements without conflict. Additional problems will be identified and related beneficial effects of any proposed solution will be discussed.

Many of the parking issues involve the commercially dominated area between Forbes St. and Annapolis St. Given this area's dominant land use, medical and general offices, long-term employees, patients, and visitors should be encouraged to park in the off-street lots which have been provided. And based on the parking space inventory and occupancy surveys, it would appear that an adequate supply has been provided. As previously mentioned, on-street spaces in this area should be available to serve any excess or overflow demand associated with those land uses, primarily short-term visitors. Given the short-term nature of typical medical and general office visits, on-street parking should be limited to 2-3 hours maximum through appropriate signage and enforcement or through the introduction of a metered parking system similar to that within the downtown area. Of the 151 on-street spaces located west of Annapolis St., only 22 were marked for 2-hour maximum parking (on Forbes St. between Melvin and Giddings). This program should be expanded to include all 151 spaces. Long-term parking would be prohibited throughout this commercial area, thereby increasing the supply of spaces available to serve the primary parking groups in this area; medical center patients and business visitors. And while a number of single family homes do exist in this area, residential parking permits may be issued to those homeowners to ensure convenient parking for their vehicles.

An added benefit of this program would include the relocation of any long-term parking activities from on-street locations to more appropriate off-street facilities. Many of these long-term parkers may represent downtown commuters avoiding the Stadium lot and the \$3.00 a day parking fee, visitors associated with the nearby courts or police operations, and/or medical and general office building employees who do not park in the off-street facilities provided by their employers. In the case of area employees, the City of Annapolis may support the creation of an employee decal system which would identify those employees, designating their appropriate off-street parking location. This system would highlight to those employees the need to locate an off-street parking space. For example, employees of the Sports Rehabilitation Center can be issued parking decals and be instructed to park in the off-site surface lot located behind Grauls Shopping Center.

Commuters to downtown Annapolis may also be parking on-street or in the shopping center lot, thereby avoiding the \$3.00 day fee at the Stadium lot, and transferring to the downtown shuttle system. Providing significant on-street time limit enforcement and ticketing of violators, an increase in the utilization of the Stadium commuter lot is likely, increasing the availability of on-street spaces for short-term visitors.

Introducing parking meters or signed time limits within the commercial section of West Annapolis may relocate parkers into the Grauls Shopping Center customer lot or into the residential areas east of Annapolis St. Therefore, the City may be required to help establish a residential permit parking system and support the development of a parking program for the shopping center. A residential permit program similar to the program implemented in the downtown district would discourage future encroachment of commercial parking activity into residential areas. With regards to parking at Grauls Shopping Center, the City could work with the manager of the center in developing a uniform program of restrictive signage, color coded ticketing (warning), and towing procedures. A uniformed approach to this program would maximize compliance, minimize legal concerns, increase the availability of parking for customer related spaces, and help support the development of an overall parking management strategy.

It is hoped that improved management and utilization of parking spaces on-street could improve the flow of traffic throughout this area. It was noted during the survey that the existence of on-street parking on both sides of the street hampers the effective and efficient flow of traffic through these streets. A number of these streets, including Melvin Ave., are required to handle significant traffic volumes. Therefore, given an improvement in the utilization of on-street spaces for transient visitors, on-street parking on heavily traveled corridors and near critical intersections, i.e. Forbes and Melvin Ave., may be eliminated or restricted to promote efficient traffic circulation without negatively affecting parking operations.

SUMMARY

This analysis examines the need to improve the management of the existing supply of parking spaces in West Annapolis. Off-street parking spaces must continue to be reserved and restricted for use by the specific employees, patients, and business visitors who frequent the office and retail sector of West Annapolis. Employees must be encouraged to use these off-street facilities through the development of an employee decal program. On-street spaces should be reserved to handle any excess or overflow parking demand associated with these uses. Therefore, given the transient nature of this type of parking demand (short-term), on-street spaces must be managed to ensure high rates of parking turnover and utilization by establishing and enforcing maximum time limits.

Overall, any suggested parking program introduced in this study must be formulated with the context of the entire West Annapolis area. Therefore, any policy development must simultaneously be applied to both the commercial and residential sectors of this area. A strategy of management and enforcement within the commercial district, without some type of residential parking program, may only force those parking in the commercial areas to relocate into the nearby residential streets. Therefore, a combination of programs would most effectively serve the area and thereby maintain the unique urban balance which this community exhibits.

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